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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 09/864,305 | 05/25/2001 | Hachirou Honda | Q64558 | 2780 |

7590 08/24/2006

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| EXAMINER |
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MILIA, MARK R

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| ART UNIT | PAPER NUMBER |
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2625

DATE MAILED: 08/24/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | | |
|------------------------------|-----------------|-----------------|--|
| Office Action Summary | Application No. | Applicant(s) | |
| | 09/864,305 | HONDA, HACHIROU | |
| | Examiner | Art Unit | |
| | Mark R. Milia | 2625 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 June 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. Applicant's amendment was received on 6/9/06 and has been entered and made of record. Currently, claims 1-10 are pending.

Response to Arguments

2. Applicant's arguments filed 6/9/06 have been fully considered but they are not persuasive. The applicant asserts that the reference of Fox (US 5890134) does not disclose a fastest-schedule scheme and a latest-schedule scheme, as the "right shift" schedule scheme and "left shift" schedule scheme of Fox do not correspond to the fastest-schedule scheme and the latest-schedule scheme. The examiner respectfully disagrees as Fox does disclose schedule schemes that correspond to a fastest-schedule scheme and a latest-schedule scheme as set forth by the current claim language. Particularly, Fox discloses entry of task data into a scheduling program, each task includes information identifying the task, the task duration, the resources needed to complete the task, and the precedent (priority) of the task (see column 6 lines 11-22). Further, as shown by the example set forth in column 12 lines 7-44, Fox discloses a system in which after a schedule has been developed and the time in which all the tasks are to be completed is determined, a boundary ("hole") is set that divides the tasks into

Art Unit: 2625

two groups with some tasks be performed before the boundary and some being performed after the boundary. A "left shift" schedule scheme is employed to allow the tasks to start as soon as possible while making sure resources are available to complete the tasks, the group of tasks that have been "left shifted" end at the boundary and after the boundary a "right shift" schedule scheme is employed to finish the second group of tasks as late as possible while making sure resources are available to complete the tasks. Thus, Fox discloses a fastest-schedule scheme and a latest-schedule scheme. Also, it would have been obvious to one of ordinary skill in the art to use the schedule scheme of Fox with a number of manufacturing projects, such as machine plate making. Therefore, the combination of Fox and Gerber discloses all of the limitations set forth in the claims, as it would have been obvious to choose the machine plate making process as the boundary and employ a "left shift" before the process and a "right shift" afterwards.

Therefore, the rejection of claims 1-7, as cited in the previous Office Action will be maintained and repeated in this Office Action. The newly added claims 8-10 will be addressed in the following rejection.

Claim Rejections - 35 USC § 103

3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Art Unit: 2625

4. Claims 1-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fox (US 5890134) in view of Gerber (US 5661566).

Regarding claims 1, 3, and 5, Fox discloses a schedule planning method, system, and program storage medium of planning a schedule for processing consisting of a series of processes, said schedule planning method comprising obtaining information concerned with the series of processes (see column 6 lines 11-22 and 35-52 and column 7 lines 45-56) and creating a schedule plan for first half processes in such a manner that a scheduling is performed in accordance with a fastest-schedule scheme for first half processes terminating up to a particular process of the series of processes obtained in the obtaining step, and creating a schedule plan for latter half processes in such a manner that a scheduling is performed in accordance with a latest-schedule scheme for half processes starting after starting point of the particular process of the series of processes obtained in the obtaining step (see column 4 line 66-column 5 line 4, column 7 lines 38-47 and 65-67, column 8 lines 18-32, 45-47, and 58-65, column 10 lines 6-34, column 11 lines 30-36, column 11 line 66-column 12 line 4, and column 12 lines 7-44, reference states that the invention can be specially constructed for a required purpose and the program configured to execute that purpose, in addition the reference states the use of a "right shift" schedule scheme and a "left shift" schedule scheme which is analogous to the fastest-schedule scheme and latest-schedule scheme in the claims and further the reference states that the boundaries can be set manually by the user thereby the system can act just as if the boundary was chosen to be in the middle of the process as stated in the claims, also the reference states that the

Art Unit: 2625

scheduling routine iterated multiple times to use a first output to be an input in a second iteration of the routine, therefore the claim is anticipated by the reference because the schedule scheme of the reference serves the same purpose and function to decrease time and improve quality and is constructed in an analogous fashion).

Fox does not disclose expressly a machine plate making process.

Gerber discloses a machine plate making process (see column 3 lines 57-62, column 4 lines 21-30 and 37-67, and column 5 lines 11-16 and 26-37).

Fox & Gerber are combinable because they are from the same problem solving area, providing a system by which to accomplish a desired task.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine the machine plate making process as described by Gerber with the schedule system of Fox.

The suggestion/motivation for doing so would have been to decrease time and improve quality by optimizing the processing leading up to the plate making process and the processes after the plate making process. Fox states that the schedule system can be used for a variety of reasons, i.e. manufacturing. Thus, it would have been obvious to use the scheduling system to improve the machine plate making process of Gerber.

Therefore, it would have been obvious to combine Gerber with Fox to obtain the invention as specified in claims 1, 3, and 5.

Regarding claims 2 and 4, Fox further discloses wherein after creating the schedule plan of the first half processes and the schedule plan of the latter half

processes, it is detected whether there is any overlapping of schedules between the schedule plan of the first half processes and the schedule plan of the latter half processes (see Figs. 2 and 3, column 6 lines 49-52, column 9 lines 17-67, and column 10 line 45-column 11 line 29).

Regarding claim 6, Fox further discloses wherein said fastest-schedule scheme comprises forming a schedule in order of higher priority of a process in practice while making sure of a resource (see column 6 lines 23-35 and column 8 lines 17-32).

Regarding claim 7, Fox further discloses wherein said latest-schedule scheme comprises forming a schedule from a later process to a former process counting backward from a date of delivery while making sure of a resource (see column 10 lines 16-25).

Regarding claim 8, Fox further discloses wherein said first half processes comprise a process requiring further alteration when the process is performed (see column 6 lines 11-52).

Regarding claim 9, Fox further discloses wherein said first half processes comprise a variable number of processes as the processes are performed (see column 6 lines 11-22, reference shows that the tasks are entered by a user and any number of tasks may be implemented).

Regarding claim 10, Fox further discloses wherein said latter half processes comprise processes requiring no further alteration when the processes are performed (see column 8 lines 44-47).

Conclusion

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

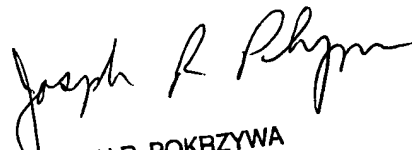
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mark R. Milia whose telephone number is (571) 272-7408. The examiner can normally be reached M-F 8:00am-4:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Twyler M. Lamb can be reached at (571) 272-7406. The fax number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Mark R. Milia
Examiner
Art Unit 2625

MRM


JOSEPH R. POKRZYWA
PRIMARY EXAMINER